



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

**Via Email**

March 14, 2016

Mr. Anthony R. Brown  
Environmental Manager  
Atlantic Richfield Company  
4 Centerpointe Drive, LPR 4-435  
La Palma, CA 90623-1066

Re: **Draft Technical Review of Interim Combined Acid Drainage Treatability Investigation Report,  
Leviathan Mine Site, Alpine County, California**

Dear Mr. Brown:

EPA has reviewed the December 18, 2015, Interim Combined Acid Drainage Treatability Investigation Report, Leviathan Mine Site, Alpine County, California (report). The report was prepared by Atlantic Richfield Company (ARC) in partial fulfillment of the requirements of the Administrative Order for Remedial Investigation and Feasibility Study (Unilateral Administrative Order), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. 2008-18 issued by the EPA on June 23, 2008; and the Administrative Settlement Agreement and Order on Consent for Removal Action, CERCLA Docket No. 2008-29/2009(a), effective January 21, 2009 (and modified as of July 22, 2013).

The report describes results of bench-scale and pilot-scale treatability studies; and full-scale capacity testing conducted during 2014 to evaluate the feasibility and effectiveness of high density sludge (HDS) treatment technology to treat combined flows from at least four of the five primary acid drainage (AD) discharges at the Leviathan Mine Site (site) in Alpine County, California. The treatability studies were conducted following preparation of the June 18, 2014 Interim Combined Acid Drainage Treatability Investigation Work Plan by ARC. The work plan was approved by EPA on October 14, 2014.

The activities proposed in the report are to plan and construct conveyance systems, conduct a full scale ICT field demonstration, and document the full scale demonstration results in a report. EPA approves implementation of the work, subject to the following conditions:

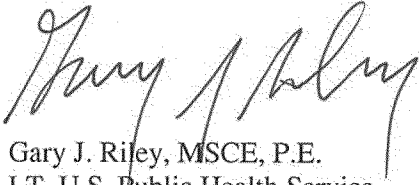
1. Modifications to the HDS plant to not interfere with or prevent continued successful completion of seasonal treatment of CUD and DS discharge during the Atlantic Richfield Work Season.
2. Construction of the Upper Ponds Conveyance System does not interfere with or prevent continued successful completion of seasonal Pond Water Treatment at Ponds 1, 2N and 2S.

This approval also notes that, while conducting ICT trials is a desirable step toward identifying an option for a long term remedy at the site, many of the design criteria in this report are not necessarily appropriate or approved for use in remedy selection and design.

EPA understands approval to being planning for construction season logistics is needed at this time so Atlantic Richfield may proceed this year. Please note EPA's concurrence with the Attachments (particularly Attachments B,C and D) is pending detailed review by EPA.

If you have any questions, please feel free to contact me at (415) 972-3003 or [riley.gary@epa.gov](mailto:riley.gary@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Gary J. Riley". The signature is fluid and cursive, with the first name "Gary" being more prominent than the last name "Riley".

Gary J. Riley, MSCE, P.E.  
LT, U.S. Public Health Service  
Remedial Project Manager

cc:

Mike Johnson, Copper Environmental